Lab 1B - Get the picture?

**Directions: Record your responses to the lab questions in the spaces provided.**

Is height a numerical or categorical variable? Why?

Is gender a numerical or categorical variable? Why?

List either the different categories or what you think the measured units are for height and gender.

Write down 3 variables that you think are *categorical* variables and why.

Write down 3 variables that you think are *numerical* variables and why.

List all the types of info the str() function outputs

Were you able to correctly guess which variables were categorical and numeric? Which ones did you mis-label?

Which function, either bargraph or histogram is better at visualizing categorical variables? Which is better at visualizing numerical variables?

What does the y-axis represent?

What does the x-axis tell us?

Would you say that *most* people *never* texted while driving? What does the word *most* mean?

Approximately what percent of the people texted while driving for 20 or more days? (Hint: There's 15,624 students in our data.

Write a sentence explaining how boys and girls differ in their use texting while driving.

Would you say that most girls never text and drive? Would you say that most boys never text and drive?

How did including the groups argument in your code change the graph?

Can you use this graphic to answer the question at the top of the slide? Why or why not?

Is grouping numeric values, such as heights, as helpful as grouping categorical variables, such as texting & driving?

Why does this work for bargraphs but not for for histograms?

Do you think males & females have similar heights? Use the plot you create to justify your answer.

Just like we did for the histogram, is it possible to create a *split* bargraph? Try to create a bargraph of drive\_text that's split by gender to find out.

What other factors do you think might affect how often people text and drive?

Choose one variable from the cdc data, make a graph, and use the graph to describe how drive\_text use differs with this variable.